ABSTRACT

A combination book binding machine with a plastic coil forming machine, whereby a plastic spiral coil is formed at a first raised temperature, then cut to a length sufficient for the plastic spiral coil to bind a book, cooled and then advanced toward a receiving coil conveyor of a coil binding machine, for binding the book with a plastic coil at the lowered cooled temperature. The binding machine and method for spirally binding a sheaf of papers into a book uses an adjustable speed drive to rotate the cooled flexible plastic spiral coil into respective holes in the book. The book has a plurality of holes in a row adjacent one edge of the book to receive the leading edge of the plastic spiral binding coils. A cylindrically shaped mandrel is spaced apart from a glidable block. The plastic pre-formed spiral binding coil is fed onto the mandrel from the distal end thereof, with the leading edge of the binding element facing and spaced apart from the book. A pair of leading edge spreaders, one of which has a guidance groove, engages the plastic spiral coil to spread its joined coil portions just enough to permit the coil to enter the successive holes of a sheaf to be bound. A trailing spreader at the opposite end insures that the last hole is accommodated with a portion of the plastic spiral coil.

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